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A REGIONAL CAREER INFORMATION CENTER, DEVELOPMENT AND PROCESS.

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THE CENTER WAS ESTABLISHED TO COLLECT, ABSTRACT, SYNTHESIZE, PRODUCE, STORE, AND DISSEMINATE CAREER INFORMATION TO HIGH SCHOOLS AND JUNIOR COLLEGES IN SAN DIEGO COUNTY, CALIFORNIA. A STUDY WAS MADE TO DETERMINE THE TYPE OF CAREER INFORMATION DESIRED BY STUDENTS AND COUNSELORS. THE INFORMATION WAS PUT ON MICROFILM APERTURE CARDS. EACH CARD CONTAINS FOUR REDUCED 8 BY 11 INCH PAGES. IN ADDITION, SELECTED OCCUPATIONAL PARAMETERS ARE KEY PUNCHED INTO THE CARD. TWO APERTURE CARDS ARE PREPARED FOR EACH OCCUPATION AND CONTAIN PHOTOGRAPHS OF LOCAL WORKERS ON THE JOB, A LIST OF CRITERIA WHICH JOB ASPIRANTS MUST MEET, A DESCRIPTION OF THE OCCUPATION, ADVANTAGES AND DISADVANTAGES, TRAINING REQUIRED, SALARY, A LISTING OF LOCAL TRAINING INSTITUTIONS, A BIBLIOGRAPHY OF LOCALLY PRODUCED STUDIES AND SURVEYS RELATING TO THE FIELD, AND A LISTING OF COMMUNITY RESOURCE PEOPLE WORKING IN THE OCCUPATION WHO HAVE AGREED TO TALK ABOUT THEIR JOBS WITH STUDENTS. INFORMATION ON APPROXIMATELY 200 OCCUPATIONS IS BEING DISSEMINATED TO 12 SECONDARY SCHOOLS NOW PARTICIPATING IN THE PROJECT. THIS DOCUMENT APPEARED IN "VOCATIONAL GUIDANCE QUARTERLY," VOLUME 15, NUMBER 3, MARCH 1967. (PS)

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A Regional Career Information Center: Development and Process

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■ Providing students with career information that is current, accurate, and readily understood has been the goal of vocational guidance specialists for many years. There is general agreement that the making of career choices by students is enhanced through the effective use of such information. [7]

In many school systems, however, the provision of appropriate career information materials is more a goal than a reality. Such materials as are available come from diverse sources, have varying formats, and usually lack specificity to the local situations. Much of this occupational literature is also out of date due to the inescapable time lag inherent in conventional production and dissemination procedures. The more current fugitive materials, since they have been prepared with an eye toward recruitment, cannot always be relied on for the objectivity desirable when students must make choices based on factual information.

A related problem arises from difficulties in filing and retrieving occupational information. Although numerous procedures have been developed, the results of a questionnaire recently administered by the Department of Education, San Diego County, indicated that a majority of the students responding made limited use of the information contained in typical occupational files. [2, 4] Abundant evidence exists to substantiate these and related weaknesses of current programs for providing occupational information to students. [1, 5, 6, 8, 9]

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Credit is acknowledged for the contribution of Mr. Martin Gerstein, Consultant, Bureau of Pupil Personnel Services, California State Department of Education, who served as a principal investigator on this project with Mr. Hoover from its inception until August 1, 1966.

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History of Center Development

These problems were recognized in San Diego County by the Coordinating Council for Vocational Education as it discussed the difficulties local schools encountered in their attempts to provide current and accurate career information on occupations not requiring a baccalaureate degree. The Council, made up of representatives from unified and high school districts, junior colleges, San Diego State College, the California State Department of Employment, and the Department of Education, San Diego County, agreed that: (1) the training of school counselors in the area of career planning was generally inadequate; (2) many school counselors were not able to keep abreast of current occupational information; and, (3) much of the occupational literature being used in the schools did not communicate to the students.

In response to Council recommendations, the Department of Education, San Diego County, submitted a proposal to establish a Regional Career Information Center to serve high schools and junior colleges in the area. Partial funding was provided by the California State Department of Education under the provisions of the Vocational Education Act of 1963 (P.L. 88-210). Phase One (February through June, 1965) of this pilot project began with a needs study to determine the type of career information desired by students and counselors. Extensive use was made of student reactor panels, advisory committees, questionnaires, and outside consultants.

At the conclusion of the needs assessment, the project concentrated on designing procedures to collect, abstract, synthesize, produce, store, and disseminate career information that was specific to those criteria which the consumers—students and counselors—had established.

A model system was developed which, it was hoped, would overcome some of the traditional criticisms of occupational literature. The specific criticisms upon which we focused were: lack of authenticity and realism; information that was not current and specific to the local labor market; and the difficulty in filing and retrieving the data.

Designing the format for presenting occupational information was the first step in developing the Career Information Center. The vehicle finally selected was the microfilm aperture card, which was chosen because it is inexpensive, can be easily updated and filed, and can be utilized directly by students and counselors at the school site as well as at the Center itself. In addition, it was possible to key punch into the card, parameters pertinent to the specific occupation, including such items as minimum aptitude levels, sex restrictions, minimum educational level, special licenses required, and local training opportunities. (See Figure 1) Thus, it was possible to sort and prepare a listing of occupations which *may* fit the student. As this program incorporates more sophisticated data-processing techniques, the search, sort, and listing can be made fully automatic. The word "may" is stressed because in no way do we envision this information system making decisions for people. To the contrary, we see this type of data storage, retrieval, and dissemination as broadening the investigation of career opportunities for young people since occupational fields which may be identified, might not have been discovered by the student if a system of this type were not available.

The main body of information for each occupation, prepared in a standardized format suitable for conversion into microfilm form, is contained in two occupational briefs. Each brief in its unconverted form consists of four $8^1/_2$ by 11 inch pages. A standardized heading was also chosen—the acronym *VIEW* (*V*ocational *I*nformation for *E*ducation and *W*ork), and the briefs are referred to

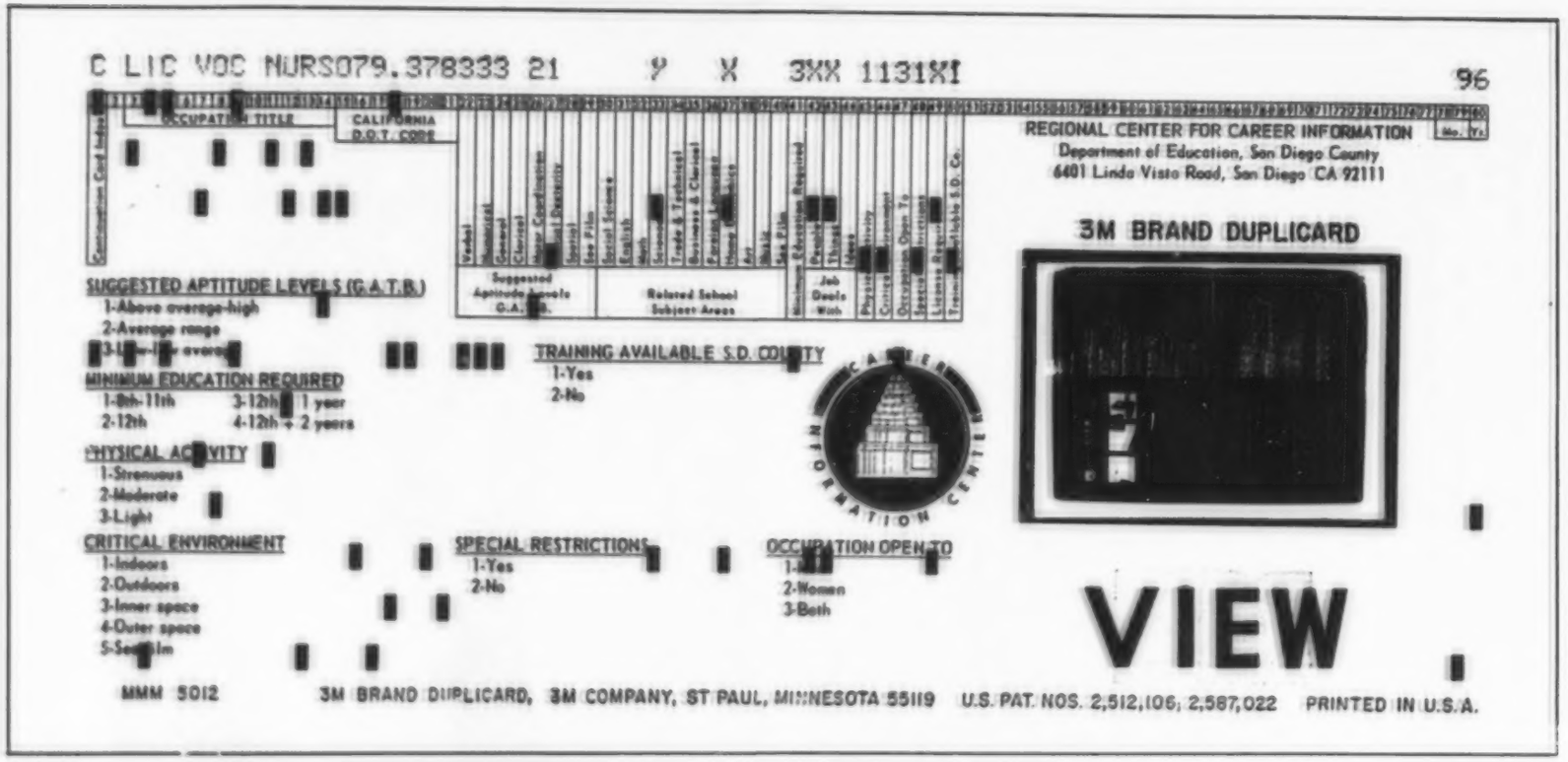

Figure 1.
Each aperture card accommodates a picture of four reduced 8½" x 11" VIEWscript pages. In addition, selected occupational parameters are key-punched into the card.

as VIEWscripts. Each of the pair of briefs for an occupation is put on microfilm that is mounted in an aperture card, by use of a processor camera.

Sources of the information used in preparing the VIEWscripts are publications from the regional and the state offices of the California Department of Employment, the Bureau of Labor Statistics, commercial publishers, and employers. From these sources pertinent data are collected, abstracted, and synthesized.

The first four-page VIEWscript contains information about the occupation which is generally applicable throughout the country. The order of presentation of the information, however, differs from conventional practice. Instead of beginning with a job description and a description of working conditions, a VIEWscript introduces the occupation with a very brief statement about the nature of the job accompanied by photographs of local workers on this job. A thorough look at criteria which aspirants must meet follows, including such items as physical health, verbal ability, and character. The second page of this VIEWscript contains a description of the occupation, its advantages and disadvantages, training required, salary, and other related information. Presenting the information in this order is based on the notion that frequently when a student looks at occupational information material, he does not psychologically get beyond the glamour or descriptive data to look at those items which may, finally, be more important in determining whether he will or will not enter a field. The remaining two pages of the first VIEWscript contain general descriptive data about the requirements and opportunities of the occupation and references to further information.

The second four-page VIEWscript for the occupation contains pertinent local information, including a listing of local training institutions, a bib-

Figure 2.
This processor camera reduces VIEWscripts to microfilm size and automatically exposes and develops the film that is contained in the aperture card.

Figure 3.
Less expensive duplicate aperture cards for dissemination to schools are reproduced from the master film card by the card-copying equipment.

liography of locally produced studies and surveys relating to the field, and a listing of community resource people working in the occupation who have agreed to talk about their jobs with students. (Talking with such resource people was rated by the students in the survey sample as probably the best way for them to obtain occupational information.)

The use of a two-card format makes it possible for the more general descriptive data (card one) to be prepared at a central location and the local information (card two) to be prepared regionally with the possibility of exchange between centers. All the aperture cards produced by the processor camera (See Figure 2) become master film cards and are retained at the Career Information Center along with the master input documents. Using a card-copier (See Figure 3), VIEWscripts are produced

from the master film card on less expensive duplicate aperture cards for distribution to school counseling centers. Card-copiers can be placed in school district offices to serve as VIEWscript distribution centers for the district's own schools, with third generation aperture cards produced from the duplicate aperture cards received in the district office.

At the termination of Phase One of the pilot program, a model system had been designed to collect, abstract, synthesize, produce and disseminate career information to counselors, vocational teachers, advisors, and school administrators for use with students in the secondary schools of San Diego County.

Phase Two of the pilot project, covering the period from July, 1965, to June, 1966, concentrated on the hospital service field because of the local job opportunities and because this occupational field presented a full skill range from minimally skilled occupations such as kitchen helpers to relatively high skill occupational groups such as registered professional nurses requiring a minimum of two years of college preparation. Information on fifty-five occupations was prepared and disseminated to six secondary schools participating in the project. Agencies contributing substantive assistance were the San Diego office of the California State Department of Employment, San Diego area junior colleges, and the Hospital Council of San Diego County. Evaluation of the project was obtained by the use of questionnaires. Students' reactions to other occupational literature was also used for comparative purposes. Since student, counselor, and administrator evaluation of the pilot project was highly favorable, the decision was made to submit a proposal to continue developmental activities of the Career Information Center.

Present Operation

For the 1966–67 school year, the Career Information Center project is being conducted with partial funding under the research section, 4(c), of the Vocational Education Act of 1963. During this developmental phase, career information is being produced for all occupations requiring less than a baccalaureate degree, for which training is available in San Diego County, and for which there are local job opportunities. This information, on approximately two hundred occupations, is being disseminated to twelve secondary schools now participating in the project. At the conclusion of this phase (June, 1967), an evaluation of the materials and the dissemination procedures will be secured from students, counselors, and school administrators in the participating schools.

During both the pilot and developmental phases each participating school was supplied a microfilm reader-printer and a reader-scanner. On the reader-scanner a student may read the information contained on an aperture card as he projects it on the viewing screen. Then, if he is interested in the occupation and wishes to study it further, he may use the reader-printer to take a printout of the information on $8\frac{1}{2}$ by 11 inch paper (See Figure 4). The number of printouts that may be produced from one aperture card is unlimited and the cost per copy is modest. The advantage of this system over the conventional checking out and returning of materials is obvious. Our experience suggests that many students only wish to read the information and the option of taking away a printed copy is not abused.

Summer Career Guidance Workshops

An ancillary objective of the Career Information Center has been a staff development program focusing on counseling in the area of educational planning and career choice. A number of district orientation and in-service meetings were held during each phase of the project. In addition, summer

Figure 4.
Students and counselors may read microfilm copies of the VIEWscripts and reproduced printed copies by using the reader-printer equipment.

workshops were conducted for counselors during the summers of 1965 and 1966 under co-sponsorship of the Extension Division of San Diego State College and the Department of Education, San Diego County.

These workshops combined two weeks of academic instruction with four weeks of on-the-job experience in entry occupations in merchandising, banking, industrial, utility, and governmental fields. Counselors were paid by the cooperating employers for their on-the-job experiences and received three units of credit for the workshop. The purpose of the experience was to supplement the counselor's knowledge of entry occupations and to give him the feel of actually performing these jobs so he could more accurately discuss the demands and rewards of the jobs with counselees.

During two weeks of instruction, the first and sixth weeks, the focus was on the theory and process of vocational choice. The group had the additional responsibility of producing copy for a document, *VIEWPOINT, Entry Employment in San Diego,* [3] which was published and distributed to all secondary school counselors in San Diego County for use in counseling students.

Employers and counselors participating in the summer workshops have been most supportive of the program. The reactions of both commend this program to others searching for a fresh approach to staff development programs in guidance and counseling.

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What's Ahead?

It is self-admitted that our efforts to date represent a modest beginning to the Herculean task of providing career information for all students. VIEWscripts produced to date have focused upon trade and technical occupations, representing but a small portion of the total spectrum of job opportunities. We believe, however, that the system can be expanded to cover the total field of career information, including that for professional level occupations.

The next goal for the project is the refinement of a storage and retrieval system for student cumulative records, information on higher education, and financial aid information that will be compatible with the system used for VIEWscripts. A related goal is that of refining the systems work required for computer storage, collation, and retrieval of this kind of data.

To provide the kind of services envisioned, it will be necessary to serve students in a broad geographic region. The exchange of information among centers similar to our Career Information Center appears to be one method of economically increasing the service to more students. Currently, the California State Departments of Education and Employment are exploring methods of extending such career information center services to other regions in California.

In the meantime, the San Diego County Career Information Center will continue to explore other applications of microfilm aperture cards to the problem of information storage, retrieval and dissemination in guidance and counseling. When the services of the San Diego County Career Information Center are fully implemented, guidance information for counselors and students may be found "in the cards."

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